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February 15, 2019

VIA ELECTRONIC FILING

Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: Oral *Ex Parte* Notice
RM Nos. 11798 & 11814
ET Docket No. 18-295
GN Docket Nos. 17-183 & 18-122

Dear Ms. Dortch:

On February 13, 2019, Dr. Greg Hyslop, the Chief Technology Officer for The Boeing Company ("Boeing") met with Julius Knapp, Chief of the FCC's Office of Engineering and Technology ("OET"). Also in attendance at the meeting on behalf of Boeing were Ted Austell, Vice President, Executive, Legislative and Regulatory Affairs; Audrey Allison, Vice President, Global Spectrum Management; Jackie Elliott, Engineering Chief of Staff; and Joseph Cramer, Regional Director, Global Spectrum Management. Also in attendance on behalf of the Commission were Aspasia Paroutsas, OET Chief of Staff, Martin Doczkat, Chief, OET Technical Analysis Branch, and Michael Ha, Deputy Chief, Policy and Rules Division.

A major focus of the meeting was a discussion on Commission initiatives that could facilitate the development of autonomous vehicles, including unmanned aerial vehicles ("UAVs"). To this end, the Commission was urged to initiate rulemaking proceedings on the adoption of technical and operational rules governing the use of the 5030-5091 MHz band for UAVs and the creation of an exception in Part 18 of the rules for the certification of RF-emitting vehicle components consistent with the same exception that has long existed in Section 15.103.

During the meeting, the Boeing representatives also highlighted the need for additional spectrum available for unlicensed use inside large aircraft and to support wireless systems used in industrial settings for such purposes as automation, worker safety, operational coordination, shipping and receiving, and security, in addition to the more typical usage by laptops and tablets. The increases in efficiency made possible through these improvements in communications and

control has dramatically increased the productivity of American factories and is driving still greater adoption of networked manufacturing using unlicensed frequencies.

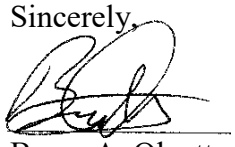
The Boeing representatives therefore expressed support for the identification of additional spectrum resources in the 6 GHz band for use by unlicensed systems and devices. Further investigation may be necessary, however, regarding measures to ensure that ultra-wideband ("UWB") systems operating in this spectrum remain viable. In addition, to ensure that this unlicensed spectrum is used for the greatest benefit, Boeing urged that the rules adopted for the 6 GHz band avoid unnecessary restrictions where possible. For example, to the extent compatible with UWB systems, the Commission should authorize the use of unlicensed devices operating in the U-NII-5 and U-NII-7 bands in indoor locations without requiring the use of automated frequency coordination. The Commission should also designate the inside of commercial aircraft as indoor locations for all 6 GHz U-NII devices, just has been done for U-NII devices in the 5 GHz band. Finally, the Commission should treat commercial aircraft parked at airport facilities as non-mobile for purposes of permitting the use of U-NII-5 and U-NII-7 communications between the aircraft and airport facilities.

Among the other topics that were discussed during the meeting was the need to ensure the ongoing protection of radio telemetry systems that operate in the 4.2-4.4 GHz band to provide highly accurate altitude and situational awareness data for aircraft operations. Boeing emphasized the need to ensure that any new use of the 3.7-4.2 GHz band does not cause harmful interference to radio telemetry systems in the immediately adjacent spectrum.

The Boeing representatives also observed that the 3.7-4.2 GHz band continues to be used for critically important satellite communications services, including communications to support air traffic control and the distribution of weather data. It was explained that adequate spectrum must be preserved to support these and other operations. Therefore, to the extent that any of the 3.7-4.2 GHz band is repurposed for other uses, Boeing would only support the proposal of the C-band satellite operators ("C-Band Alliance") to repurpose 200 MHz of the 3.7-4.2 GHz band through a secondary markets process that will ensure that the throughput capacity of the remaining 300 MHz is increased sufficiently to preserve existing satellite communications services

Thank you for your attention to this matter. Please contact the undersigned if you have any questions.

Sincerely,



Bruce A. Olcott
Counsel to The Boeing Company